



**DEPARTMENT OF THE NAVY**  
NAVAL SURFACE WARFARE CENTER  
CARDEROCK DIVISION

NAVAL SHIP SYSTEMS  
ENGINEERING STATION  
5001 SOUTH BROAD STREET  
PHILADELPHIA, PA 19112-1403

IN REPLY REFER TO:

Code: 4222  
J&A Number: 4221-13-002-00  
P.R. Number: 1300275627

**JUSTIFICATION AND APPROVAL  
FOR USE OF OTHER THAN FULL AND OPEN COMPETITION**

**JUSTIFICATION**

**1. Contracting Activity**

Naval Sea Systems Command, Naval Surface Warfare Center, Carderock Division (Code 4222).

**2. Description of the Action Being Approved**

This is a Limited Source Justification to be awarded without providing for full and open competition. The proposed contract action is a new Firm Fixed Price contract for Flexible Thermocouple Harnesses and Probes in support of LM2500 Marine Gas Turbine Engine Technical Directive Gas Turbine Change (GTC) 96.

**3. Description of Supplies/Services**

The proposed acquisition will provide for the furnishing of thirty (30) sets of new Flexible Thermocouple Harnesses and Probes:

Each set consists of the following:

3-Probe Harness – Qty 3

2-Probe Harness – Qty 1

Probe – Qty 11

The purpose of GTC-96 is to incorporate an improved T<sub>5,4</sub> thermocouple harness with detachable probes to replace the current four “hard lead” harnesses with new flexible leads, which can withstand bending during installation and removal. The detachable thermocouple probes reduce replacement costs by allowing for individual probes to be replaced vice the entire harness and can be disconnected from the flexible harness without removal of the harness brackets for a higher degree of maneuverability during maintenance.

The anticipated delivery date is 120 days from the date of contract award. The total estimated dollar value of this acquisition is \$360,000.


The harnesses and probes shall be delivered to:  
NSWCCD-SSES  
1601 Langley AVE, Bldg 542E  
Philadelphia, PA 19112  
Attention: Leslie LaGrossa, Code 9330, 215.897.7803

The Government's minimum needs have been verified by the certifying technical requirements personnel.

#### **4. Statutory Authority Permitting Other Than Full and Open Competition**

10 U.S.C. 2304(c)(1). Only one responsible source, or, for DoD, NASA, and the Coast Guard, from only one or a limited number of responsible sources, and no other type of supplies or services will satisfy agency requirements, full and open competition need not be provided for. (FAR 6.302-1)

#### **5. Rationale Justifying Use of Cited Statutory Authority**

The flexible thermocouples and probes replace the four hard lead harnesses and fixed probes on the LM2500 Marine Gas Turbine Engine. It is a form, fit, and functional replacement of the existing T<sub>5.4</sub> hard lead harness and fixed probe system requiring no replacement of the thermocouple aft hard lead section installed by Gas Turbine Change (GTC) 31.

There are four (4) companies that are known to make the Thermocouple Harness and Probe kits with the required form, fit and function in the commercial marketplace:

Ametek, Inc (CAGE 97424)

J.G.W. (International) LTD (CAGE 1C8B0)

Harco Laboratories, Inc (CAGE 00060)

Turbine Technics (CAGE 49C77)

Three (3) of these companies (Ametek, J.G.W. and Harco) are the original designers, developers, and sole manufacturers of their own versions of the flexible thermocouple harness and probe kits. General Electric Company supplies new construction LM2500 engines with Ametek thermocouple harnesses and probes. JGW thermocouple harnesses and probes were tested on USS RAMAGE (DDG 61) as well as the DDG-51 LBES and certified acceptable by the technical code, 9340. Harco Labs thermocouple harnesses and probes were certified for use on the LM2500 engine through testing at the DDG-51 LBES by the technical code, 9340. Turbine Technics, Inc. is a distributor of Weston Aerospace who is now owned by JGW (International) LTD.

Additionally, it was necessary that these four manufacturers' products function properly when intermixed with each other. Data from testing on the DDG-51 LBES concluded that the components from Ametek, JGW, Harco and Turbine Technics could be mixed in any combination on the LM2500 and the system would function normally.

#### **6. Description of Efforts Made to Solicit Offers from as Many Sources as Practicable**

Market research was initially conducted by the technical code by contacting the three (3) firms which submitted quotes for the required items under two prior competitive contract actions: Ametek, Inc.,

Weston Aerospace (owned by J.G.W.) and Harco Laboratories. Ametek, Inc. received an award under purchase order N65540-09-P-5372 and Weston received an award under purchase order N65540-10-P-5308. [REDACTED] Harco

Laboratories' materials have been tested at LBES and found qualified. It is to be noted that these prior competitive contract actions were synopsisized in the Fed Biz Opps and no other firms indicated an interest in this requirement.

On 29 November 2012, a synopsis was issued in the Fed Biz Opps advising potential contractors of the Government's intent to limit this acquisition to three (3) firms. The synopsis also advised interested persons to identify their interest and capability to respond to the requirement or submit quotes. Two (2) firms (Turbine Technics, Inc. and Herber Aircraft) indicated an interest in the requirement. [REDACTED]

#### **7. Determination of Fair and Reasonable Costs**

The Contracting Officer will make a determination as to whether the costs covered by this J&A are fair and reasonable, prior to award.





#### **8. Actions to Remove Barriers to Competition**

The Marine Gas Turbine Program currently provides the thermocouple harnesses and probes as a kit for each USN LM2500 on a one-time basis. Thereafter, replacement parts must be requisitioned from the stock system. The stock system currently supplies material from Ametek and JGW. Companies interested in supplying parts to the stock system, and by extension, Naval Sea Systems Command, Naval Surface Warfare Center, Carderock Division (Code 9340) may request its material be tested on the DDG-51 LBES to be considered for potential bidder status on future contract actions for the reasons stated in Paragraph 5.

TECHNICAL AND REQUIREMENTS CERTIFICATION – (FAR 6.303-2(c))

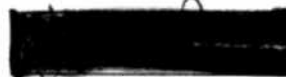



I certify that the facts and representations under my cognizance, that are included in this justification and its supporting data, including Acquisition Plan No. N/A, except as noted herein, are complete and accurate to the best of my knowledge and belief.

TECHNICAL COGNIZANCE:

Signature                      Name (Print) and Title (Code)                      Phone No.                      Date





REQUIREMENTS COGNIZANCE:

Signature                      Name (Print) and Title (Code)                      Phone No.                      Date

LEGAL SUFFICIENCY REVIEW (NMCARS 5206.303(90))


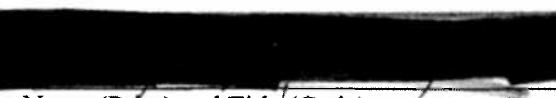


I have determined that this justification is legally sufficient.

Signature                      Name (Print) and Title (Code)                      Phone No.                      Date

CONTRACTING OFFICER CERTIFICATION – FAR 6.303-2(b)(12) (Note: Pursuant to FAR 6.304(a)(1)), this certification also serves as approval of J&A's not exceeding \$650,000)

I certify that this justification is accurate and complete to the best of my knowledge and belief.

Signature                      Name (Print) and Title (Code)                      Phone No.                      Date